

WHAT IS CLAIMED IS:

1. A pedestrian protection airbag system mounted on a vehicle comprising:

5 a control unit which receives signals from a sensor capable of detecting a pedestrian;

an airbag for thrusting out from an airbag storage portion by inflation so as to deploy between said pedestrian and said vehicle;

10 an inflator for supplying inflation gas to said airbag; and

a thrust assist for facilitating said airbag to thrust out from said airbag storage portion;

15 wherein said control unit receives the signal from said sensor to perform a touch detection that said control unit anticipates that said vehicle will touch said pedestrian, and an approach detection that said control unit detects said pedestrian approaching said vehicle;

wherein said control unit actuates said thrust assist when the touch detection is performed; and

20 said control unit actuates said inflator when the touch detection is performed.

2. A pedestrian protection airbag system according to Claim 1, wherein said thrust assist includes a movement unit operating
25 to move a cover member covering said airbag storage portion

so as to expose said stored airbag to outside of said vehicle when said movement unit is actuated.

3. A pedestrian protection airbag system according to Claim 5 1, wherein said thrust assist includes a drawing unit operating to draw out at least a part of said stored airbag from said airbag storage portion when said drawing unit is actuated.

4. A pedestrian protection airbag system according to Claim 10 1, wherein any portion of said thrust assist actuated after said approach detection is actuated by the control unit so as to be restored to an unactuated state when said touch detection is not obtained even after said approach detection.

15 5. A pedestrian protection airbag system according to Claim 1, wherein said airbag is stored on a front portion side of said vehicle so that said airbag can cover at least an area ranging from a front surface of said vehicle near a front grille thereof to a front-portion-side top surface of a hood panel 20 of said vehicle when said airbag is completely inflated.

6. A pedestrian protection airbag system according to Claim 2, wherein said airbag is stored in a front bumper of said vehicle; and

25 said thrust assist is designed so that:

said cover member covering said stored airbag is designed as a front bumper of said vehicle; and

said movement unit moves said front bumper so as to expose said stored airbag from above when said movement unit is
5 actuated.

7. A pedestrian protection airbag system according to Claim 3, wherein said airbag is stored in a front bumper of said vehicle; and

10 said drawing unit of said thrust assist draws out at least a part of said stored airbag toward a front surface of a front grille of said vehicle when said drawing unit is actuated.

8. A pedestrian protection airbag system according to Claim
15 7, wherein said drawing unit draws out at least a part of said airbag clear of an area in front of each head lamp of said vehicle when said drawing unit is actuated.

9. A pedestrian protection airbag system according to Claim
20 1, wherein said airbag is stored in a vicinity of a cowl of said vehicle so that said airbag covers at least an area ranging from a rear-portion-side top surface of a hood panel of said vehicle to a lower-portion front surface of a wind shield of said vehicle when said airbag is completely inflated.

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10. A pedestrian protection airbag system according to Claim 9, wherein said airbag has a pillar cover portion capable of covering a front surface side of a front pillar of said vehicle.

5 11. A pedestrian protection airbag system according to Claim 2, wherein:

said airbag is stored near a rear end of a hood panel of said vehicle; and

said thrust assist is designed so that:

10 said cover member is disposed above said airbag storage portion and on a rear-end-side top surface of said hood panel; and

said movement unit moves said cover member upward so as to expose said stored airbag from above when said movement unit
15 is actuated.

12. A pedestrian protection airbag system according to Claim 11, wherein:

said thrust assist has a drawing unit capable of drawing
20 out at least a part of said stored airbag from said airbag storage portion when said drawing unit is actuated; and

said drawing unit is designed to draw out at least a part of said stored airbag substantially in a front/rear direction of said vehicle and from an opening formed due to movement of
25 said cover member caused by actuation of said movement unit.